

Virginia Department of Environmental Quality
EMS Manual

The Virginia Department of Environmental Quality (DEQ) has implemented an environmental management system (**EMS**) based on ISO 14001 criteria, the International and American National Environmental Management System Specification. The current scope of the DEQ EMS program covers the internal operations of DEQ and is designed to improve DEQ's environmental performance as an agency. This manual, the ***EMS Manual***, contains 1) the appropriate ISO 14001 and Virginia Environmental Excellence Program elements, 2) descriptions of the core elements of the DEQ **EMS**, and, where necessary, 3) directions to related documents and information.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 1 of 11

Virginia Department of Environmental Quality

EMS Manual

Environmental Policy

DEQ's Mission Statement and Environmental Policy:

Mission Statement

The Department of Environmental Quality protects and enhances Virginia's environment, and promotes the health and well being of the citizens of the Commonwealth.

Environmental Policy

Commitments: *The DEQ, in its operations and activities, will demonstrate leadership and environmental stewardship through an EMS that:*

- *Ensures DEQ's compliance with all applicable environmental laws and regulations, and with other requirements to which the organization subscribes;*
- *Identifies and implements techniques and environmentally sound practices that emphasize the environmental management hierarchy of pollution prevention (source reduction), reuse, recycling, treatment, and environmentally safe disposal;*
- *Promotes continual improvement in the DEQ's EMS practices and leading to improved environmental performance;*
- *Openly communicates to all employees and the public via the internal and external web sites, DEQ's EMS policy, our identified environmental aspects, objectives and targets and programs to achieve them, and the results of these efforts;*
- *Provides human, financial and technical resources appropriate to the active management and maintenance of the EMS; and*
- *Encourages all employees, to the best of their abilities, to be accountable for implementing, maintaining, and upholding this policy.*

Partnership: *The DEQ will encourage environmental stewardship and foster improved environmental collaboration with stakeholders by:*

- *Exchanging mutually beneficial knowledge with, and encouraging open communication among, all partners including the regulated and non-regulated communities, the general public and environmental associations, regional and national agencies and EMS organizations, DEQ employees, and other State agencies; and*
- *Encouraging and recognizing innovative ideas and solutions.*

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 2 of 11

Virginia Department of Environmental Quality

EMS Manual

Performance: *To achieve the goals and objectives of the EMS, and to promote continual improvement, the DEQ will develop and implement an environmental management system that includes:*

- *A direct link to DEQ's strategic planning and budgeting process;*
- *Appropriate procedures and training; and*
- *Performance measures and self-assessment through annual program reviews.*

This Environmental Policy shall be communicated to all employees by the **EMS Manager** and maintained on DEQ's website by the Public Affairs Manager.

1. Environmental Aspects, Objectives and Targets, and Environmental Management Programs

1.1. Environmental Aspects & Significant Impacts

Each year, in the month of February, the **EMS Project Team** shall 1) identify, through informal activity mapping and discussion, the environmental aspects of DEQ's activities, products, and services in order to, 2) determine, through reference to the definition of environment and discussion until a consensus is reached, which aspects have or can have a significant impact on the environment.

The results of exercising this procedure shall be maintained by the **EMS Manager** in a document that records the findings of the **EMS Project Team**, the environmental objectives and targets, the management programs and plans for achieving them, and progress toward achieving environmental objectives and targets.

1.2. Objectives and Targets

Concurrent with its determination in February of each year as to which of DEQ's environmental aspects are potentially significant environmental impacts, the **EMS Project Team** shall establish environmental objectives and targets for the upcoming fiscal year and submit these recommendations to the **DEQ Management Team** for review and approval. These Environmental Objectives and Targets shall be documented and maintained by the **EMS Manager**.

1.3. Environmental Management Programs (Energy, Water, Implementation Plan)

Concurrent with its determination in February of each year as to which of DEQ's environmental aspects are potentially significant environmental impacts and its establishment of Environmental Objectives and Targets, the **EMS Project Team** shall establish management plans and programs to achieve the environmental objectives and targets for the upcoming fiscal year. These

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 3 of 11

Virginia Department of Environmental Quality

EMS Manual

management plans and programs shall include designation of person(s) responsible for their achievement, means and methods of achievement, and timeframes for achievement. These Management Plans and Programs shall be documented and maintained by the **EMS Manager**.

2. Legal and Other Requirements

In line with DEQ's Environmental Policy commitment to complying "*with all applicable environmental laws and regulations, and with other requirements to which the organization subscribes,*" the **Director** shall require the Director of Administration and each of the Regional Directors to compile archives of relevant environmental laws, directives, regulations, ordinances, and other requirements¹ applicable to the people, activities, and facilities under their control and forward them to the Office of Policy. As part of compiling the archives of environmental laws, directives, regulations, and other requirements, the Director of Administration and the Regional Directors shall determine and document how these laws, directives, regulations and other requirements apply to the facilities under their management.

The Office of Policy shall maintain this archive of relevant environmental laws, directives, regulations, ordinances, and other requirements in accordance with the Documentation, Document Control, and Records requirements of this manual.

The Office of Policy shall continually monitor and review selected sources of information for new legislation proposed in the Congress of the United States and the Virginia Legislature, and for new regulations and changes proposed by the U.S. Environmental Protection Agency, the Virginia DEQ, and other federal and state agencies, applicable to the people, activities, and facilities of the DEQ, and shall forward such information to the Director of Administration and the Regional Directors, as appropriate.

The Regional Directors shall continually monitor and review selected sources of information for new environmental ordinances and changes proposed by the municipalities within their regions and shall forward such information to the Office of Policy.

The **EMS Manager** shall periodically monitor and review identified other requirements¹ to determine their ongoing consistency with DEQ's Environmental Policy and shall apprise the Director of Administration and/or Regional Directors of any new requirements or conflicts brought about by changes in other requirements.

3. Structure and Responsibility

The following roles, responsibilities, and authorities govern the operation of DEQ's **EMS**:

Top Management

The top management role belongs to the **Director** of the Virginia Department of Environmental Quality who has the responsibility and authority for managing all aspects of DEQ's activities and

¹ Other requirements are those charters, principles, guidelines, codes of conduct, or by-laws of organizations that DEQ supports or is affiliated with in any way as well as the requirements imposed by federal grants.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 4 of 11

Virginia Department of Environmental Quality
EMS Manual

operations. The **Director** receives this delegation of responsibility and authority from the Secretary of Natural Resources.

EMS Management Team

The **Director** exercises his responsibility and authority for the **EMS** collegially through the **EMS Management Team** which is comprised of the **Director** and members of the **DEQ Leadership Team (LT)**. The **EMS Management Team** shall specifically review and approve the environmental objectives and targets submitted to it by the **EMS Project Team**, provide the human, financial, and technological resources and assets essential to the implementation and control of the **EMS**, and at least once annually, conduct a management review of the **EMS** for suitability, adequacy, and effectiveness.

EMS Project Team

The **Director** delegates primary responsibility and authority for implementation and maintenance of the **EMS** to the **EMS Project Team**. Headed by the **EMS Manager**, the **EMS Project Team** shall be comprised of representatives from each Regional Office and of the various media and program areas in the Central Office. The **EMS Manager** and **EMS Project Team** shall be responsible and accountable for the implementation and maintenance of the **EMS** according to the appropriate requirements of ISO 14001 and DEQ's Environmental Excellence Program. The **EMS Manager** shall be responsible for reporting to the **Director** and the **EMS Management Team** on the performance of the **EMS**.

EMS Assessment Team

An ad hoc team established by the **EMS Manager** with responsibility and authority to conduct an audit of the **EMS** each year during the month of October.

Agency Office Team

Teams established within the Central Office and each Regional Office by the **EMS Manager** in concurrence with the Program Directors and Regional Directors to carry out the objectives and targets and other elements of the **EMS**.

4. Training, Awareness, and Competence

4.1. General Awareness Training

All DEQ employees shall receive general awareness **EMS** training. The general awareness training subjects shall include the Environmental Policy, the potentially significant environmental impacts, the objectives and targets, and employees' roles and responsibilities in meeting the requirements of the **EMS**.

The DEQ Training Manager shall ensure that **EMS** general awareness training shall be embedded in the overall DEQ training curriculum being developed by the DEQ Training Committee.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 5 of 11

Virginia Department of Environmental Quality

EMS Manual

4.2. Significant Impact Training

Concurrent with its determination in February of each year as to which of DEQ's environmental aspects are potentially significant environmental impacts, the **EMS Project Team** working with the DEQ LT and the Training Manager shall identify the training needs of personnel whose work can cause a significant impact on the environment, determine the criteria for personnel competence, and recommend timeframes for delivery of training to the DEQ's Training Committee. These training needs shall become a part of the Environmental Objectives and Targets for the upcoming fiscal year.

The Training Committee shall determine the means and methods for delivery of this significant environmental impact training subject to DEQ's overall mission requirements.

4.3. Training Records

Records of training related to the **EMS** shall be established and maintained by the DEQ's Training Manager in accordance with Virginia's record retention policy for state agencies.

5. Communication

5.1. Internal Communication

In line with its Environmental Policy commitment of "*encouraging open communication among all ... DEQ employees,*" DEQ will communicate to all levels and functions within DEQ relevant information about major areas of **EMS** activity, including:

- Environmental aspects and impacts
- Environmental objectives and targets
- Environmental management roles and responsibilities
- DEQ's performance compared to its environmental objectives and targets
- Environmental policies and procedures

The **EMS Manager** and the Public Affairs Manager shall be responsible for ensuring that this procedure is carried out through use of the internal communication systems of the agency.

5.2. External Communication

In line with DEQ's Environmental Policy commitment to "*encourage environmental stewardship and foster improved environmental collaboration with stakeholders,*" DEQ will establish and maintain open communication channels for the exchange of mutually beneficial knowledge and information with all external, interested parties.

5.2.1. Receipt of External Communications

Any employee receiving a communication about the **EMS** or DEQ's environmental performance from an external party shall refer that communication to the **EMS Manager**, the Director of Administration or the appropriate Regional Director for a decision on response. The **EMS Manager** shall make all such responses on behalf of the DEQ and shall maintain records of all

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 6 of 11

Virginia Department of Environmental Quality

EMS Manual

incoming environmental communications, including non-written communications, and of their disposition.²

5.2.2. Outreach

It is appropriate for DEQ to initiate community outreach efforts on its Environmental Policy and the **EMS**. Outreach efforts shall be the responsibility of the **EMS Project Team** which shall establish outreach objectives when establishing DEQ's other Environmental Objectives and Targets. Such outreach objectives shall be consistent with the Environmental Policy. The **EMS Management Team** shall consider outreach efforts and results when conducting the management review of the **EMS**.

5.2.3. Website

DEQ will maintain information on its website about the Environmental Policy, the **EMS**, its environmental impacts, and its environmental objectives and targets. The **EMS Manager**, in collaboration with the Public Affairs Manager, shall be responsible for establishing and maintaining this information.

6. EMS Documentation and Document Control and Records

6.1. EMS Documentation

This **EMS Manual** describes the core elements of the **EMS** and provides direction to related materials. ISO 14001 criteria, in its various sections, requires that, at a minimum, the following policies, procedures, and delegations of authority be documented:

- The Environmental Policy
- The Environmental Objectives and Targets
- **EMS** Roles, Responsibilities, and Authorities
- Description of the Core Elements of the **EMS**
- Operational Procedures whose absence could result in deviations from the Environmental Policy or failure to achieve environmental objectives and targets
- Procedures to monitor and measure key characteristics of activities and operations that can have a significant impact on the environment
- Procedure for periodically evaluating compliance with environmental regulations
- Results of top management reviews of the **EMS**

This **EMS Manual** shall either contain these policies, procedures, and delegations of authority within its text or provide direction to users as to where they are contained.

Maintenance of the **EMS Manual** shall be the responsibility of the **EMS Manager** and staff.

² Responses on requests for information about the EMS and DEQ's environmental performance shall be made by the Public Affairs Manager.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 7 of 11

Virginia Department of Environmental Quality
EMS Manual

6.2. EMS Document Control

The **EMS Manager** shall maintain and control the *EMS Manual* and all other documents associated with it, such as the environmental objectives and targets, management plans to achieve them, and records of progress toward achievement. In maintaining and controlling the *EMS Manual*, the **EMS Manager** shall ensure that the current *EMS Manual* and its associated documents are posted on the DEQNET.

The **EMS Manager** shall preserve an original electronically of all documents and changes, establish and maintain a record of all document changes, and ensure that all documents are numbered, dated with dates of origination or revision, and, where necessary, signed and approved.

6.3. EMS Records

§3 of this manual requires that the Office of Policy shall maintain an archive of relevant environmental laws, regulations, ordinances, and other requirements. §5.3 of this manual requires that the DEQ's Training Manager shall be responsible for maintaining records of training. §6.2.1 of this manual requires that the **EMS Manager** shall maintain a record of all incoming external environmental communications and of their disposition.

In addition to these recordkeeping requirements, the **EMS Manager** shall maintain records of findings and recommendations from **EMS** and regulatory compliance audits and documents, exhibits, and minutes of management reviews. All **EMS** records shall be permanently maintained unless and until Virginia's record retention policy establishes a lesser requirement.

7. Operational Controls

7.1. Operational Controls over Significant Impact Activities and Operations

Concurrent with its determination in February of each year as to which of DEQ's environmental aspects are potentially significant environmental impacts, the **EMS Project Team** shall identify the operations and activities associated with these potentially significant environmental impacts and direct the manager of the operation or activity involved to establish and maintain operational controls to avoid the occurrence of a significant environmental impact, deviations from the Environmental Policy, or failure to achieve environmental objectives and targets. The operational control opportunities identified shall become a part of the Environmental Objectives and Targets for the upcoming year.

7.2. Operational Controls for Goods and Services Used by DEQ

Concurrent with its determination in February of each year as to which of DEQ's environmental aspects are potentially significant environmental impacts, the **EMS Project Team** shall 1) review the goods and services used by DEQ and supplied by others and 2) determine the potential significant environmental impacts associated with these goods and services. The **EMS Manager** shall communicate relevant procedures and requirements to the suppliers and contractors of these goods and services in order to reduce the adverse environmental impacts of these goods and services.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 8 of 11

Virginia Department of Environmental Quality
EMS Manual

8. Emergency Preparedness and Response

The **EMS Project Team** shall work with the DEQ Safety Director on the Agency's emergency preparedness and response plan elements.

The **DEQ LT** shall periodically and where practicable, direct the test of such emergency response procedures.

9. *Monitoring and Measurement*

9.1. Monitoring and Measurement of Significant Impact Activities and Operations

Concurrent with its determination in February of each year as to which of DEQ's environmental aspects are potentially significant environmental impacts, the **EMS Project Team** shall identify the operations and activities associated with the potentially significant environmental impacts and establish procedures to monitor and measure key characteristics of these operations and activities in order to avoid the occurrence of significant environmental impacts, deviations from the Environmental Policy, or failure to achieve environmental objectives and targets. The monitoring and measurement activities established shall become Environmental Objectives and Targets for the upcoming fiscal year.

9.2. *Evaluation of Compliance with Legislation and Regulations*

The **DEQ LT** shall be responsible for evaluating actual compliance with relevant environmental laws and regulations. The **EMS Manager** shall assist the **LT** in fulfilling this responsibility by arranging for the conduct of environmental regulatory compliance audits by a team of internal auditors in October of each year.

To the extent reasonably practicable, internal auditors shall be independent of people and activities audited. Internal auditors shall be competent by virtue of training and experience to perform environmental regulatory compliance audits.

Audit reports shall be submitted to the **EMS Management Team** for its use in conducting the management review of the **EMS** in November of each year.

10. Nonconformance and Corrective or Preventive Action

10.1. *General*

The DEQ shall investigate all instances of nonconformance with the **EMS** and take appropriate mitigating, corrective, or preventive action. The objective of nonconformance investigations shall be to identify the root causes of actual or potential nonconformances. Events that constitute a nonconformance sufficient to automatically trigger a nonconformance investigation include:

- Adverse findings of an **EMS** or regulatory compliance audit;
- Discovery of noncompliance with an environmental law, regulation, ordinance, or other requirement;

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 9 of 11

Virginia Department of Environmental Quality
EMS Manual

- Occurrence of a sudden, catastrophic event;
- Any incident that, except for fortuitous circumstances, could have resulted in a sudden, catastrophic event;
- Failure to achieve environmental objectives and targets;
- Material noncompliance with the Environmental Policy; and
- Such other nonconformances as might from time to time be identified.

10.2. Nonconformances within a Region or the Central Office

If a Regional Director or the Director of Administration documents an **EMS** nonconformance within her/his jurisdiction, the Regional Director or Director of Administration shall establish an investigative committee appropriate to the circumstances of the nonconformance and take such mitigating, corrective, or preventive actions as are warranted after receiving the report of the committee.

10.3. Agency-wide Nonconformances

If the **EMS Manager** documents an **EMS** nonconformance involving the agency as a whole or more than one Region and/or the Central Office, the **EMS Manager**, with the approval of the Director, shall establish an investigative committee appropriate to the circumstances of the nonconformance and take such mitigating, corrective, or preventive actions as are warranted after receiving the report of the committee.

10.4. Individual Employee Nonconformance

Each DEQ employee is required to consistently demonstrate environmental stewardship by participating in the programs of the **EMS** as appropriate to his/her position in the Agency (Employee Work Profile). If it is determined that an employee is the cause of an **EMS** nonconformance, the **EMS Manager** working with the appropriate Program Director and the Training Manager will take such mitigation, corrective, or preventative actions as are warranted to return the employee to compliance with the EMS policy.

11. Environmental Management System Audits

The **EMS Project Team** shall be responsible for ensuring that the **EMS** conforms to the appropriate requirements of ISO 14001 and DEQ's Environmental Excellence Program requirements and is properly implemented and maintained. The **EMS Project Team** shall verify that this responsibility is effectively carried out by arranging for the conduct of **EMS** audits by a team of internal auditors in October of each year.

To the extent reasonably practicable, internal auditors shall be independent of people and activities audited. Internal auditors shall be competent by virtue of training and experience to perform EMS audits.

Audit reports shall be submitted to the **EMS Management Team** for its use in conducting the management review of the **EMS** in November of each year.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 10 of 11

Virginia Department of Environmental Quality
EMS Manual

12. Management Review

The **EMS Management Team** shall each year in the month of November review the **EMS** to ensure its continuing suitability, adequacy, and effectiveness. Minutes of the review meeting shall be taken in order to document all issues discussed, decisions made, and actions directed. The **EMS Manager** shall permanently maintain a record of all documents, exhibits, and minutes of the management review.

The **EMS Management Team** shall determine how the **EMS** has performed by evaluating:

- The appropriateness of the Environmental Policy to the nature, scale, and environmental impacts of DEQ's activities, products, and services;
- The effectiveness of the **EMS** in accomplishing top management's objectives for an **EMS**;
- Changing circumstances which influence the suitability, effectiveness, or adequacy of the **EMS**;
- The adequacy of roles, responsibilities, authorities, and procedures to accomplish the objectives of the **EMS**;
- The extent to which environmental objectives and targets have been achieved;
- The adequacy of the human, financial, and technological resources provided by management to accomplish the implementation and control of the **EMS**;
- The results of the determination of which environmental laws, regulations, and ordinances DEQ is subject, which it is in compliance with, and the plan to achieve compliance with all relevant environmental laws, regulations, and ordinances;
- The results of environmental regulatory compliance audits and **EMS** audits;
- The results of monitoring and measuring activities and operations associated with the significant environmental impacts;
- The achievement of **EMS** outreach objectives in line with the Environmental Policy;
- The extent to which the DEQ meets the requirements for an Environmental Enterprise under DEQ's Environmental Excellence Program; and
- The extent to which the **EMS** has been improved in the current execution cycle.

Document Control Number: EMS 0100.02		Title: DEQ EMS Manual	
Origin Date: June 11, 2001	Revision Date & Number : 04/06/07, 01	Effective Date: April 6, 2007	Printed Page: 11 of 11